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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/777,416	02/06/2001	Hitoshi Kimura	450100-02990	6963

20999 7590 10/06/2003

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745 FIFTH AVENUE- 10TH FL.  
NEW YORK, NY 10151

EXAMINER
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AZARIAN, SEYED H

ART UNIT	PAPER NUMBER
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2625

DATE MAILED: 10/06/2003

5

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/777,416

Applicant(s)

KIMURA ET AL.

Examiner

Seyed Azarian

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 February 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-20, 22-35 and 37-43 is/are rejected.
- 7) ☒ Claim(s) 7, 21 and 36 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2002 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

**Claim Rejections - 35 USC § 103**

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6, 8-20, 22-35, and 37-43, are rejected under 35 U.S.C. 103(a) as being unpatentable over Ando et al (U.S. patent 6,609,175) in view of Sakamoto et al (U.S. patent 6,510,112).

Regarding claim 1, Ando et al discloses information recording method, information recording device, and information storage medium comprising;

an information storage method, a first step of inputting information to be stored (column 10, lines 34-46, information recorded in the main memory 112);

and a second step of autonomically and periodically reproduce representation of said information input in the first step after the representation of the information once changes with a disturbance (column 24, lines a change in the amount of reflected light, and reproducing the signal on the information storage medium).

However Ando et al is silent about “disturbance”. On the other hand Sakamoto et al in the same field of recording medium teaches (Fig. 3, column 7, lines 35-49, a disturbance source 29 for supplying disturbance to the adder 30, and a second detecting block 121 for detecting a gain change amount of a signal output from the adder 30).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made, to modify Ando et al invention according to the teaching of Sakamoto et al because it provides replacing a defective area occurring on the information storage medium which improve the managing file identification information to make it easier to identify different type of data and achieve stability.

Regarding claim 2, Ando et al discloses the information storage method according, wherein the information to be stored is input to a plurality of information carrier storage means that interact with each other (column 14, lines 17-28, DVD video or DVD-ROM or vide and audio bit streams (plurality of information) are recorded in a mixed manner).

Regarding claim 3, Ando et al discloses the information storage method according, wherein interaction of said information carrier storage means includes nonlinear diffusion of information carriers (column 19, lines 38-45, linear replacement explained layer).

Regarding claim 6, Ando et al discloses the information storage method, wherein reproducibility of representation of said information is controlled by adjusting the place and amount of said dissipation (column 10, lines 48-60, controller 115 that performs display 116 and exchange information with main CPU).

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Regarding claim 8, Ando et al discloses the information storage method, wherein said disturbance is random addition of information carriers (column 3, lines 14-19, storage medium which are additionally provided with a file partial delete command).

Regarding claim 10, Ando et al discloses the information storage method according to claim 1 wherein said disturbance is evenness of integral values of added amounts of information carriers occurring periodically (column 26, lines 4-13, refer to integral).

Regarding claim 13, Ando et al discloses the information storage method, wherein said second step includes a step of adding a predetermined amount of information carriers to said information carrier storage means, then having a predetermined amount of information carriers diffused between a predetermined set of said information carrier storage means, having a predetermined amount of information carriers dissipated from said information carrier storage means, and having the diffusion and the dissipation repeated until the amount of information carriers (see claim 1, and column 37, lines 9-17, the pieces of information is repeated, thereby accessing the desired file data).

Regarding claim 16, Ando et al discloses the information storage device, wherein said information is input to a plurality of information carrier storage means that interact with each other (column 14, lines 17-28, DVD video or DVD-ROM or vide and audio bit streams (plurality of information) are recorded in a mixed manner).

Regarding claim 17, Ando et al discloses the information storage device, wherein interaction of said information carrier storage means includes nonlinear diffusion of information carriers column 19, lines 38-45, linear replacement explained layer).

Regarding claim 20, Ando et al discloses the information storage device according to claim 18 wherein reproducibility of representation of said information is controlled by adjusting the place and amount of said dissipation (column 10, lines 48-60, controller 115 that performs display 116 and exchange information with main CPU).

Regarding claim 23, Ando et al discloses the information storage device, wherein said disturbance is permutational addition of information carriers (column 37, lines 9-17, the pieces of information is repeated, thereby accessing the desired file data).

Regarding claim 29, Ando et al discloses an information storage device having the function of reproducing representation of input information autonomically and periodically after the representation of the information once changes due to a disturbance, comprising: input means supplied with data expressed by n-dimensional vectors (where n is a natural number); storage means made up of n pieces of information carrier storage means for storing data input to said input means; control means for adding a predetermined amount of information carriers to data stored in said storage means, diffusing a predetermined amount of information carriers and dissipating a predetermined amount of information carriers (see claim 1 and column 74, lines 15-29, the file system 2 judges whether the buffer memory 219 in the information recording and reproducing device is going to overflow).

Regarding claims 4-5, 18-19 and 30-34, recite similar limitation as claims 1 and 3 are similarly analyzed.

Regarding claims 9, 22, 37-39, recite similar limitation as claim 8 is similarly analyzed.

Regarding claims 11, 15, 24-25, 35 and 40, recite similar limitation as claims 6 and 10 are similarly analyzed.

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Regarding claims 12, 14, 26-28 and 41-43, recite similar limitation as claims 1 and 13 are similarly analyzed.

### Allowable Subject Matter

3. Claims 7, 21 and 36, are objected as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitation of the base claim and any intervening claims.

### Other prior art cited

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. patent (5,177,732) to Lee et al is cited for optical recording using an agglomerating recording medium, which changes reflectivity upon recording.

U.S. patent (5,247,575) to Sprague et al is cited for information distribution system.

U.S. patent (4,864,537) to Michl et al is cited for pome and dye combinations and method for their use in optical recording.

U.S. patent (4,551,819) to Michl et al is cited for optical recording method and apparatus utilizing polymeric birefringent materials.

U.S. patent (5,995,474) to Shimano et al is cited for flying type optical head integrally formed with light source and photo detector and optical disk apparatus with the same.

### Contact Information

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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seyed Azarian whose telephone number is (703) 306-5907. The examiner can normally be reached on Monday through Thursday from 6:00 a.m. to 7:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta, can be reached at (703) 308-5246.

**Any response to this action should be mailed to:**

Assistant Commissioner for Patents  
Washington, D.C. 20231

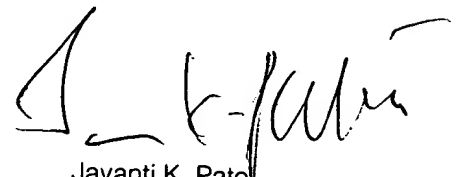
**Or faxed to:**

(703) 872-9306, ("draft" or "informal" communications should be clearly labeled to expedite delivery to examiner).

**Hand delivered responses** should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to T.C. customer service office whose telephone number is (703) 306-0377.

*Seyed Azarian*  
*Patent Examiner*  
*Group Art Unit 2625*  
September 22, 2003



Jayanti K. Patel  
Primary Examiner